



# MS851 ESD

## Rugged Handheld Laser ESD Scanner



The MS851 ESD (Electrostatic discharger) laser scanner is a high-performance device but additional designed to satisfy the stringent requirements of cleanrooms and static-safe manufacturing environments.

### ESD Protection

unitech's MS851 ESD-safe scanner is made by the internal mixed way with antistatic agents to protect the MS851 series to be ESD safe to be used at ESD protected area including its cable. The body of the product and its cable can withstand ESD up to  $10^5 \sim 10^9$  ohms per square and no containing Chlorine material. The Internal mixed way can provide a longer time of ESD protection than external addition way due to external additional anti-static in the latter part of the packaging or processing process was wiped away. The internal mixed antistatic agent can continue to add antistatic agent to the plastic surface, to make up the surface due to wipe and the amount of antistatic agent consumed. It is a reliable tool to streamline your workflow in manufacturing environments.

### Intuitive and aggressive handheld scanning performance

Built-in a powerful scan engine, the MS851 ESD provides impressive speedy and accurate scanning performance in large working range from near to 5 meters. unitech MS851 ESD handheld laser scanner is the widest working range in this class which is ideal for a broad range of market applications such as document processing, retail and inventory applications. Featuring advanced laser scanning technology, the MS851 has the automatic scanning ability with a scan rate of up to 104 scans per second. It also has the ability to capture long range 1D barcodes, even damaged or poorly printed barcodes. This device enhances the workflow efficiency in an affordable price.

### Compact but durable

Due to different operational modes: trigger mode and presentation mode, The MS851 ESD can be used in the most practical way depending on the scanning task. This scanner can be configured via USB, and RS232 and offers replaceable cables ensuring ease of integration. Equipped with a louder beeper and brighter LED indicators, the MS851 ESD allows users to recognize the feedbacks easily even in dark environment. While sustaining a 2.1 meter drop to concrete, MS851 ESD incorporated with IP42 rugged design for protection against dust and moisture. Moreover, the built-in long lifecycle trigger of 10 million times guarantees a continuous productivity for best reliability.

### Features

- Withstands ESD up to  $10^5 \sim 10^9$  ohms per square
- Offers longer working range, a wider scan field, high-speed and sensitive scanning performance.
- Support most standard 1D barcodes
- Long lifecycle trigger design: Up to 10,000,000 times.
- Ultra-rugged design : IP42 and 2.1m drop spec
- Louder beeper and brighter LED indicators for easily recognizing feedbacks
- Lightweight design: 147g without cable.

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# MS851 ESD

## Specifications

### Optical & Performance

Receiving Device	Laser Engine
Light Source	650 nm visible laser diode
Optical Resolution	4mil (0.1mm)
Scan Rate	104 (± 12) scans/sec (bidirectional)
Skew Angle	±40° from normal
Pitch Angle	±65° from normal
Printing Contrast Scale	minimum 20%
Depth of Field	(DOF PCS=80%)
	Symbology   Density   Near   Far
	Code 128, 5 mils   3.55 cm   17.78 cm
	Code 39, 5 mils   3.05 cm   26.67 cm
	Code 39, 7.5 mils   3.04 cm   41.91 cm
	Code 128, 10 mils   3.05 cm   40.46cm
	UPC, 13 mils   4.57 cm   63.50 cm
	Code 128, 15 mils   5.08 cm   66.04 cm
	Code 39, 20 mils   3.56 cm   116.84 cm
	Code 39, 55 mils   8.64 cm   177.80 cm
	Code 39, 100 mils   60.96 cm   457.20 cm
Symbologies	Code 39, Full ASCII Code39, Interleave 2 of 5, UPC A/E/E1, MSI, Codabar, Code 11, EAN8/13, Code 93, Code 128, EAN128, Code32, GS1 databar Code, Bookland EAN, Discreate 2 of 5, Chinese 2 of 5, ISBT 128, UCC Coupon Extended Code, Bookland 128
Operation Mode	Trigger mode, Pulse mode, Flash mode, Continuous Mode
Data Formatting	Prefix, Suffix, Code ID, Reformatting Date

### Communication

Host Interface supported	USB
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### Mechanical

Dimension	87.8 L x 71.6 W x 177.7 H (mm)
Weight	147g without cable
Trigger Switch Life	10 million times

### Electrical

Operation Voltage	4 VDC to 5.5 VDC
Current Consumption	Operation mode: <110mA Standby mode: <20mA
User Indicators	Direct decode indicator, good decode LEDs, beeper (adjustable tone/volume)

### Environmental

ESD Protection	Functional after 8K Contact and 15K Air
Mechanical Shock	2.1M onto concrete (scanner only)
IP Rate	IP42
Operating Temperature	-10°C to 50°C (14°F to 122°F)
Storage Temperature	-40°C to +70°C (-40°F to +158°F)
Relative Humidity	95% non-condensing

### Regulatory

CE, FCC, BSMI, VCCI

### Accessories

Standard Hands Free Stand (Optional)

### Package Contents

MS851 ESD Scanner  
Interface cable



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